CLAIM AMENDMENTS:

Pending Claims

Claim 1 (Canceled).

Claim 2 (Currently Amended): The method as recited in claim [[1]] $\underline{5}$, further comprising the step of automatically tagging said current electrocardiogram record with a special tag.

Claim 3 (Original): The method as recited in claim 2, wherein said tagging step is performed by a satellite system connected to a network, further comprising the step of sending said specially tagged current electrocardiogram record to a central database via said network.

Claim 4 (Canceled).

Claim 5 (Currently Amended): A [[The]] method for monitoring a patient for the presence of a new bundle branch block, comprising as recited in claim 4, wherein said automated comparison further comprises the steps of:

acquiring current and previous electrocardiogram records at different times for a particular patient;

determining that a new bundle branch block is present in said particular patient based on an automated comparison of data in said current and previous electrocardiogram records;

automatically detecting that said particular patient belongs to a category of patients comprising patients identified to have a high probability of acute myocardial infarction; and

automatically generating a diagnostic statement stating that the new bundle branch block may be due to acute myocardial infarction,

wherein said automated comparison comprises the following steps:

determining that said current electrocardiogram record comprises a diagnostic statement indicating the presence of a bundle branch block and determining that said previous electrocardiogram record does not comprise a diagnostic statement indicating the presence of a bundle branch block;

computing a percentage change in a measurement relating to a bundle branch block criterion in said current and previous electrocardiogram records; and

determining that said percentage change exceeds a first predetermined threshold.

Claim 6 (Original): The method as recited in claim 5, wherein said automated comparison further comprises the steps of:

computing a correlation value for respective waveforms in said current and previous electrocardiogram records using cross correlation; and

determining that said correlation value exceeds a second predetermined threshold.

Claims 7-9 (Canceled).

Claim 10 (Currently Amended): The system as recited in claim [[9]] 13, further comprising means for tagging said current electrocardiogram record with a special tag if said detecting means have detected that said particular patient belongs to said category.

Claim 11 (Original): The system as recited in claim 10, further comprising a network and a central database connected to said network, wherein said determining means, said

detecting means, said generating means and said tagging means comprise programming executed by a computer connected to said network, said programming further comprising a routine for sending said specially tagged current electrocardiogram record from said computer to said central database via said network.

Claim 12 (Canceled).

Claim 13 (Currently Amended): \underline{A} [[The]] system as recited in claim 12, for monitoring a patient for the presence of a new bundle branch block, comprising:

means for acquiring current and previous electrocardiogram records at different times for a particular patient;

means for determining whether a new bundle branch block is present in said particular patient based on a comparison of data in said current and previous electrocardiogram records;

means for detecting whether said particular patient belongs to a category of patients comprising patients identified to have a high probability of acute myocardial infarction, said detecting means being operative if said determining means have determined that a new bundle branch block is present; and

means for generating a diagnostic statement stating that the new bundle branch block may be due to acute myocardial infarction, said generating means being operative if said detecting means have detected that said particular patient belongs to said category,

wherein said determining means further comprise said a computer programmed to determine which of said current and previous electrocardiogram records contain a diagnostic statement indicating the presence of a bundle branch block, and to perform the following steps if said current electrocardiogram record contained a statement indicating the presence of a bundle

branch block and said previous electrocardiogram record did not contain a statement indicating the presence of a bundle branch block:

computing a percentage change in a measurement relating to a bundle branch block criterion in said current and previous electrocardiogram records; and

comparing said percentage change to a first predetermined threshold.

Claim 14 (Original): The system as recited in claim 13, wherein said determining means further comprise said computer programmed to perform the following steps if said percentage change exceeded said first predetermined threshold:

computing a correlation value for respective waveforms in said current and previous electrocardiogram records using cross correlation; and

comparing said correlation value to a second predetermined threshold.

Claim 15 (Original): The system as recited in claim 14, wherein said detecting means comprise said computer programmed to detect whether said particular patient is suspected to have suffered acute myocardial infarction if said correlation value exceeded said second predetermined threshold.

Claim 16 (Currently Amended): The system as recited in claim [[9]] $\underline{13}$, wherein said detecting means detect that said particular patient belongs to said category by recognizing that said current electrocardiogram was acquired from a hospital unit for patients suspected to have acute myocardial infarction.

Claim 17 (Currently Amended): The system as recited in claim [[9]] 13, wherein said detecting means detect an indicator included in said current electrocardiogram, said indicator

identifying a symptom indicative of suspected acute myocardial infarction.

Claim 18 (Canceled).

Claim 19 (Currently Amended): The system as recited in claim [[18]] $\underline{23}$, wherein said instrument comprises a bedside monitor in a coronary care unit, emergency department or chest pain clinic, further comprising a local area network connecting said computer to said bedside monitor.

Claim 20 (Currently Amended): The system as recited in claim [[18]] 23, wherein said computer is further programmed to tag said current electrocardiogram record with a special tag if said detecting step has detected that said particular patient belongs to said category.

Claim 21 (Original): The system as recited in claim 20, further comprising a central database and a network connecting said computer to said central database, wherein said computer is further programmed to send said specially tagged current electrocardiogram record to said central database via said network.

Claim 22 (Canceled).

Claim 23 (Currently Amended): A [[The]] system as recited in claim 22, for monitoring a patient for the presence of a new bundle branch block, comprising:

memory for storing a previous electrocardiogram
record;

an instrument for acquiring a current electrocardiogram record at a time which is later than the time when said previous electrocardiogram record was acquired; and

a computer programmed to perform the following steps:

determining whether a new bundle branch block is present in said particular patient based on a comparison of data in said current and previous electrocardiogram records;

detecting whether said particular patient belongs to a category of patients comprising patients identified to have a high probability of acute myocardial infarction, said detecting step being performed if a determination has been made that a new left bundle branch block is present; and

generating a diagnostic statement stating that the new bundle branch block may be due to acute myocardial infarction, said generating step being performed if membership of said particular patient in said category has been detected,

wherein said determining step comprises the step of determining which of said current and previous electrocardiogram records contain a diagnostic statement indicating the presence of a bundle branch block, and further comprises the following steps, which are performed if said current electrocardiogram record contained a statement indicating the presence of a bundle branch block and said previous electrocardiogram record did not contain a statement indicating the presence of a bundle branch block:

computing a percentage change in a measurement relating to a bundle branch block criterion in said current and previous electrocardiogram records; and

comparing said percentage change to a first predetermined threshold.

Claim 24 (Original): The system as recited in claim 23, wherein said determining step further comprises the following steps, which are performed if said percentage change exceeded said first predetermined threshold:

computing a correlation value for respective waveforms in said current and previous electrocardiogram records using cross correlation; and

comparing said correlation value to a second predetermined threshold.

Claims 25-29 (Canceled).